

Patient information – strabismus service

Botulinum toxin treatment for squint

This leaflet is intended as general information for patients attending the clinic for the first time.

What does a botulinum toxin injection do?

Botulinum toxin causes a temporary, partial or complete, paralysis (weakness) of the muscle into which it has been injected. To begin with, you may notice a temporary reversal of your squint, followed by gradual straightening of the eyes as the paralysis wears off.

Will botulinum toxin affect my general health?

The treatment we give is safe and there is no risk of developing botulism or food poisoning. We have never had a patient experience any general health problem with botulinum, but all medication carries a small potential risk of a serious allergic reaction (anaphylaxis).

There is no known risk of harmful effects when the treatment is given to women


who are pregnant or breastfeeding, but some patients prefer to postpone treatment until they have given birth or weaned their child. If you are breastfeeding, we strongly advise that you express your milk to use for 24-48 hours following the injection. For further information, please see our separate leaflet on the use of botulinum toxin in breastfeeding & pregnancy.

Who will I see when I attend the clinic?

You will be examined by an orthoptist and then you will see one of the doctors. If the treatment is suitable for you, you will be asked to read and sign a consent form and you will usually receive the treatment on the same day in the clinic. You should expect to be in the clinic for the whole afternoon.

What is the treatment procedure?

You will be given local anaesthetic drops to numb your eye, which may remain numb for a few hours. These drops are



very effective in taking away the surface sensation of the eye, but you might still experience some discomfort when the injection is given, especially if there is scar tissue around the muscle from previous surgery. To prevent this, it may be necessary to administer extra anaesthetic drops on a cotton bud to the muscle just before the injection. Some people find it helpful to take oral painkillers beforehand.

After the local anaesthetic drops, you will be given a drop to reduce the risk of bleeding when having the injection. This drop also dilates the pupil so you may experience blurred vision for a few hours.

You will then have some wires attached to your forehead which connect to a loudspeaker – this allows the injection to be precisely placed in the muscle by monitoring the muscle's electrical activity, which is heard as a noise from the loudspeaker.

During the procedure, you will be asked to lie back on a couch. Keeping your head still throughout, we will ask you to look to one side with your eyes to place the injection, and then to the other side to use the muscle. You will hear a loud noise from the loudspeaker and the medication is injected. The injection will be held in place for 35 seconds. Occasionally, we may inject more than one muscle.

The injections are only given by qualified eye doctors, although there may be observers in the room watching the procedure.

What happens after the injection?

You will be asked whether you would prefer to wear an eye shield or your own glasses to protect your eye. This is because your eye is numb and so it needs to be protected for about three hours after the injection, in case something blows into it without your knowledge. You may feel an ache in your eye after the injection and you can take a painkiller to relieve this if necessary.

When should I expect to see an effect from the treatment?

You will usually notice the effect about two days after the injection.


How long does the effect last?

This can vary, but it usually lasts for weeks, and occasionally months, before it wears off.

What are the possible side effects?

Nearly all side effects are temporary and improve with time. Potential side effects can include:

- Temporary reversal or change in the direction of the squint
- Temporary double vision



Do not drive while you have double vision. It is very important that you discuss this with the doctor before treatment if this is of particular concern to you. For more information, please see the double vision and driving section on the DVLA website.

- Temporary drooping of the eyelid on the injected side – this usually recovers after a few weeks
- Bruising of the surface of the eye – the eye looks red (subconjunctival haemorrhage)
- Bruising around the eye affecting the lids – looks like a black eye
- Rarely, there may be a scratch on the front of the eye (cornea) from the anaesthetic used before the injection or from minor injury whilst the eye is still numb
- Very rarely, the injection can cause permanent paralysis of the injected muscle
- There is an extremely rare possibility of the needle piercing the eye, or significant bleeding occurring around the eye, causing serious eye or vision damage. This risk is no greater than one in 5,000 injections.

When do I return to the clinic?

We like to see all of our new patients one or two weeks after the injection. If the first injection did not produce an adequate effect, we may offer a repeat injection at that visit. Sometimes we may offer to

inject more than one muscle at the first or follow up visit.

Please note: there are a few patients that experience minimal or no changes to their squint, despite repeated injections.

Other important information

Botulinum toxin has been used to treat eye disorders for more than 30 years.

Although Botulinum toxin was originally introduced for the treatment of squint in 1979 (with our clinics successfully treating patients since 1982), the manufacturers have never applied for a drug product licence. We use it on a 'named patient' basis, and records are kept of all injections and patient details. This is one of many examples of a drug with a product license for one condition being used safely and successfully for another condition.

If you are not clear about any part of this treatment or have any questions, please ask the doctor or orthoptist to explain further. Please keep this leaflet for future reference.

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you further – see above for contact details. For more information about your rights under the NHS constitution, please visit www.nhs.uk/choiceinthenhs.

Moorfields Direct advice line

Phone: 020 7566 2345

Monday to Friday, 8.30am–9pm

Saturday, 9am–5pm

Information and advice on eye conditions and treatments from experienced ophthalmic-trained nurses.

Patient advice and liaison service (PALS)

Phone: 020 7566 2324 or 020 7566 2325

Email: pals@moorfields.nhs.uk

Moorfields' PALS team provides confidential advice and support to help you with any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks

Under the NHS constitution, all patients have the right to start their consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise